

Las Cruces, N. M., 13th May, 1895. (Miss Jessie Casad, no. 296.) Taken on mesquite.

I had described this as a distinct species, but after prolonged consideration I believe it to be but a varietal form of *P. nitidella* Ckll. In typical *nitidella* the median excursion of the yellow does not extend to the middle ocellus, while in the variety it may be said to do so, the interval between its upper border and the ocellus being scarcely observable with a strong lens. In *nitidella* the incur-sion of the blue terminates in a right angle, whereas in the variety its termination is much more acute. Other differences will appear to any one comparing the descriptions.

Typical *nitidella* was taken in September.

Perdita punctosignata, n. sp.—♂ about $4\frac{1}{2}$ mm. long. Head moderately broad, vertex minutely roughened, not punctate. Cheeks beneath with sparse hairs. Antennae yellow; tip of scape, funicle, and flagellum except last two joints, brown above. Head, including face and cheeks, entirely dull yellow except a broad transverse black band stretching from eye to eye on vertex, and enclosing the two lateral ocelli; a black basi-occipital band connected with that on vertex in median line; and a conspicuous black spot close to the anterior orbit about as far above level of insertion of antennae as length of scape. The yellow of the face becomes paler downwards, the labrum being rather whitish.

Thorax bright lemon yellow, with two broad black bands extending backwards from near the anterior margin of the mesothorax to the metathorax, where they meet; making the whole of the dorsum of metathorax black except a couple of yellow spots in the median line near its anterior border. The dorsum of scutellum and post-scutellum are broadly greenish-yellow. Tegulae hyaline. Wings hyaline, nervures pale, stigma hyaline with a brown margin, third discoidal excessively indistinct. Legs all yellow, except a brownish shade behind middle tibiae, and a still stronger shade on hind tibiae and a slight brown spot at end of hind femora.

Abdomen yellow with sepia bands; first segment mostly sepia, with an interrupted yellow band and yellow anterior border; second and third segments each with a narrow proximal and a broad distal band, the latter narrowing suddenly before lateral margin; fourth segment similar, but the distal band narrower; fifth segment with the bands becoming obscure, or at least the distal one. Venter all yellow.

Hab. Close to the Agricultural College, Las Cruces, N. M., 13th May, 1895, on mesquite. (Miss Jessie Casad, no. 297.)

By the face-makings, this might be confounded with *P. martini* Ckll., but the yellow thorax with broad longitudinal bands will at once separate it.

III. A MUTILLID WHICH RESEMBLES THISTLE-DOWN.

Sphaerophthalma gloriosa Sauss., var. nov. *pseudopappus*.—♀ about 13 to 16 mm. long, entirely dull black, clothed with very long pure white hairs. The long hairs on the dorsum of the second segment of abdomen are about 5 mm. long. The first abdominal segment widens gradually to the second, and is dorsally bare, with white hairs at base and apex.

Hab. Las Cruces, New Mexico, in June. One also on September 6. Mr. Fox knows it also from Arizona and California.

I have never seen typical *gloriosa*, in which the body color is reddish, but Mr. Fox assures me that the present insect is but a variety of it. It is, perhaps, rather a subspecies, for I have now seen about 8 specimens, every one of them black. A specimen of *S. sackenii*, collected in California, and sent to me by Mr. Wickham, is very different. It is larger, the hairs have a yellowish tinge, and the pubescence on the legs, venter, etc., is black; whereas in *pseudopappus* all the pubescence is white.

As it runs over the ground, this insect looks extremely like a bit of thistle-down blown by a gentle breeze. The resemblance is so extraordinary, that it is difficult to realize that it is an insect until it is actually in the killing-bottle. It proceeds in a zigzag

jerky manner, so increasing the illusion. What is the purpose of this mimicry, I do not know; these creatures possess powerful stings, and most of the allied forms seem to be warningly colored—usually contrasts of black and red.

T. D. A. Ckll.

IV. NEW SPECIES OF COCCIDAE.

BY T. D. A. COCKERELL.

Aspidiotus hartii, n. sp. — ♀ scales irregular, subcircular to oval, about $1\frac{1}{2}$ mm. diam., moderately convex, dull brownish-gray, with a slight purplish tint; first skin partly covered or entirely exposed, shining pale straw-color, nearly central. When removed, the scales leave a conspicuous white mark, with no black ring.

♂ scale colored like that of the ♀, small, elongate, with the exuviae near one end.

♀ brown, becoming pale lemon yellow when boiled in soda. 5 groups of ventral glands, median of about 4, cephalolaterals 9, caudolaterals 6 to 7. Anal orifice posterior to level of caudolateral glands, but some distance from hind end. No long tubular glands at bases of lobes. Two pairs of lobes only; median large with parallel sides and gently rounded subtruncate ends, slightly diverging, not contiguous, obscurely notched at end towards outer side. Second lobes similar in shape, but much smaller. Two rather stout branched plates between the median lobes, and two between 1st and 2nd lobes. Margin cephalad of 2nd lobe with first three stout strongly branched plates close together, then three equally long but not so stout and only slightly branched plates further apart. Then two very slender small plates, then a long interval, then the margin coarsely serrate, with about 6 serrations.

Hab. Trinidad, West Indies, in great numbers on tubers of yam. Sent by Mr. Hart, of the Royal Botanic Gardens. The occurrence of an *Aspidiotus* on yams was

hardly expected; though Mr. Barber had sent me from Antigua a new *Lecanium* (*L. batatae* Ckll. ined.) on sweet potato tubers. The present insect is allied to *Aspidiotus sacchari* Ckll., 1893.

Aspidiotus sphaerioides, n. sp. — ♀ scale circular, rather over 1 mm. diam., in numbers on the leaf, moderately convex, dark reddish-brown, with the part covering the exuviae indicated by a pale raised ring. When rubbed, the exuviae are uncovered and appear shining black. Removed from the plant, the scale leaves a whitish patch, surrounded by a blackish ring.

♀ pale yellow, circular, mouth-parts about as far from anterior margin as their length. Anterior margin with a row of about 9 strong spines or stout hairs, such as I have seen in no other species. Anal orifice oval, a fair distance from hind end, but posterior to level of caudolateral groups of glands. 5 groups of ventral glands, caudolaterals of 3, cephalolaterals 4, median 3.

Three pairs of well-developed lobes, small but distinct, about equal in size, rounded, with a slight tendency to be notched on each side. Branched plates, hardly longer than the lobes, between them. Margin cephalad of 3rd lobe very coarsely serrate, with five large serrations, the bases of these all fringed with numerous tubular glands. Long tubular glands at bases of lobes; those cephalad of median lobes, and in the interval between 2nd and 3rd lobes much the longest; that cephalad of 3rd lobe next longest.

Hab. On leaves of New Zealand flax.